

## ABSTRACT OF THE DISCLOSURE

A corn plant is evaluated by a six-step method. The first step is to select a population of mature corn plants to be evaluated. A limited number of representative plants from the population are then selected. The  
5 representative plants are then harvested by cutting them near the ground. The plants are then ground into a homogeneous mixture. A sample of the homogeneous mixture is then analyzed in a near infrared spectrometer. The analysis is then compared with an existing correlation between near infrared analyses and wet-test chemistry tested nutritional compositional  
10 characteristics to predict the compositional characteristics of the corn plant population.